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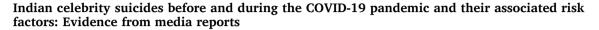
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#### 1. Introduction

The coronavirus disease-2019 (COVID-19) pandemic has caused untold suffering among all aspects of human lives. Subsequent mental health effects can be debilitating because most other aspects of day-today living are interlinked with it, either directly or indirectly (Islam et al., 2020; Khan et al., 2020). Without any specific treatment or a vaccine in sight, and the sheer magnitude of cases, worldwide healthcare systems have been hugely impacted (Mamun and Griffiths, 2020a). The restricted social interaction brought about by the protracted lockdowns can have a negative impact both emotionally and psychologically (Dsouza et al., 2020). Financial recession, economic fallout, joblessness, and closure of businesses are all associated with protracted lockdowns, and have the potential to cause mental instability. A recent study conducted in Bangladesh amongst unemployed individuals observed higher than normal prevalence rates of depression (82%), anxiety (61.5%) and stress (64.8%), and such high prevalence rates have not been reported elsewhere in other cohorts (Mamun et al., 2020). Therefore, it is clearly evident that the financial crisis associated with the COVID-19-related lockdowns can negatively impact the mental health of the masses (Oyesanya et al., 2015; Rafi et al., 2020) and in some extreme cases have the potential to even push the vulnerable population towards suicide (Bhuiyan et al., 2020; Dsouza et al., 2020; Mamun and Ullah, 2020).

During the COVID-19 lockdown, India appears to have had a sudden surge in the reported cases of suicides. The first reported case of suicide related to COVID-19 was in India wherein the victim committed suicide because of the fear of contracting the infection (Goyal et al., 2020). More recently, Dsouza et al. (2020) attempted to present the aggregated suicide cases in India by extracting reports from several popular Indian press media reports (March 23 to May 24, 2020). A total of 69 COVID-19 related suicides were reported (aged 19–65 years; 63 males and six females). The study reported the most common suicide causalities to be (i) fear of infection (n = 21) (ii) financial crisis (n = 15), (iii) testing positive for COVID-19 (n = 7), while the causes for the remaining 26 cases included (iv) being lonely due to home quarantine, (v) being socially boycotted and pressure to be quarantined because others thought the

person had COVID-19, (vi) experiencing COVID-19 work-related stress, (vii) being unable to return home after lockdown was imposed, and (viii) being unable to buy alcohol (among those with alcohol use disorder) (Dsouza et al., 2020).

One of the possible limitations of this study was its inability to report the professions of the individuals committing suicide, which might also have had a potential impact on the study's findings. For instance, individuals with lower income are at a greater risk of suicide, owing to the lockdown associated financial distress as compared to those who are financially stable and have higher incomes (Oyesanya et al., 2015; Mamun and Ullah, 2020). However, if lockdown-related financial strife is one of the major contributing factors for suicide among the underprivileged, there arises a question as to what could be the potential reason behind the increased incidence of suicide among the economically privileged and the social elite. Therefore, the present study assessed suicide victims based on a specific high-profile occupation (celebrities working in the entertainment industry). The present study also examined the probable causality of suicides both before and during the COVID-19 pandemic period.

## 2. Methods

In the absence of any updated and functional suicide surveillance system, this study collated relevant information from press reports. Extracting information from previously published media reports is a popular method of reporting suicides amongst the South-East Asian countries. In context of COVID-19-related suicides, this method has become widely used (e.g., Bhuiyan et al., 2020; Dsouza et al., 2020; Griffiths and Mamun, 2020; Mamun and Griffiths, 2020c). Consequently, the *Google News* search engine was used to retrieve relevant articles. The search terms included, 'Indian cinema celebrities', 'celebrity suicides', 'COVID-19 pandemic', 'depression', 'financial strife', and 'lockdown related restriction'.

#### 3. Results

Over the past 17 years, several celebrities of Indian cinema have committed suicide. Between 2002 and 2019, 16 such cases of celebrity suicide have been reported in the media (ten males and six females) details of which are presented in Table 1. Moreover, during the ongoing COVID-19 pandemic, seven cases of suicide among celebrities working in the Indian entertainment industry were also retrieved from media reports (three males and four females). Furthermore, the most common cause of reported suicide during the different time periods was depression (n = 17) although, family problems (n = 3), bipolar disorder (n = 1), and personal reasons (n = 1) along with one case wherein the cause of suicide was unreported. Mumbai was the city with the highest number of alleged suicides (n = 10), followed by Chennai (n = 4), Hyderabad (n = 3), New Delhi (n = 2), Kerala (n = 2), Indore (n = 1) and the village of Mandhya in Karanataka (n = 1).

## 4. Discussion

To the best of the authors' knowledge, the present study is the first to assess the nature of suicide and its associated causality among Indian celebrities. The incidence of reported suicides appeared to increase during the COVID-19 pandemic. There have been many published reports discussing suicidality during the ongoing COVID-19 pandemic (e. g., Bhuiyan et al., 2020; Dsouza et al., 2020; Goyal et al., 2020; Griffiths and Mamun, 2020; Mamun and Ullah, 2020, 2020c). A key difference between the Indian celebrity suicides during the ongoing COVID-19 pandemic and the non-COVID-19 pandemic-related suicides is the time period over which they occurred. More specifically, while the 16

celebrity suicides prior to the COVID-19 pandemic were spread over 17 years (2002-2019), the seven celebrity suicides during the COVID-19 pandemic occurred within a three-month period. Depression was reported to be the most common cause of celebrity suicides both before and during the COVID-19 pandemic, but the increased incidence of celebrity suicides during the ongoing pandemic suggests a possible association between COVID-19-related restrictions and the exacerbation of preexisting mental health conditions such as depression that increases the risk of suicidality among Indian celebrities. Strict spatial distancing measures along with social isolation tend to increase anxiety, which can have far-reaching consequences amongst the vulnerable (e.g., elderly, those with preexisting medical conditions such as respiratory problems) and those with preexisting mental conditions (e.g., depression, anxiety, etc.). These factors have the potential to increase the risk of suicidality (Mamun and Griffiths, 2020b, 2020c). Lockdown-associated loneliness has the capacity to cause depression, which if left untreated, can lead the sufferer towards suicidality, amongst the celebrities as well as non-celebrities.

Moreover, celebrity suicide risk factors during the COVID-19 pandemic (e.g., depression) appear to be more restricted than those reported for the Indian general population (Dsouza et al., 2020). The presence of depression as a probable cause of suicide is fairly different from the suicide causality reported from other south Asian countries. For instance, Mamun and Ullah (2020) reported Pakistani COVID-19 suicidality cases wherein the economic recession was the cause of 12 of the reported 16 cases, while the probable cause of suicide in the remaining four cases was fear of COVID-19 infection. One potential limitation of this Pakistani study is that it only included the general population not celebrities. Even though lockdown-associated economic recession might

**Table 1**Details of the celebrity suicides during and before the COVID-19 pandemic.

Case	Celebrity suicides prior to the COVID-19 pandemic				Celebrity suicides during the COVID-19 pandemic			
	Name and age of the victim	Location and date of suicide	Gender	Mode of alleged suicide and reason	Name and age of the victim	Location and date of suicide	Gender	Mode of alleged suicide and reason
1	Kushal Punjabi (42 years)	Mumbai (December 26, 2019)	Male	Hanging at his home - Depression	Manmeet Grewal (32 years)	Mumbai (May 15, 2020)	Male	Hanging at his home – Depression
2	Nitin Kapoor (58 years)	Mumbai (March 14, 2017)	Male	Jumping from a building – Bipolar disorder	Preksha Mehta (25 years)	Indore, Madhya Pradesh (May 25, 2020)	Female	Hanging at her home- Depression
3	Pratusha Banerjee (24 years)	Mumbai (April 1, 2016)	Female	Hanging at her residence - Depression	Disha Salian (28 years)	Mumbai (June 8, 2020)	Female	Jumping from a building- Depression
4	Jiah Khan(25 years)	Mumbai(June 3, 2013)	Female	Hanging at her residence - Depression	Sushant Singh Rajput(34 years)	Mumbai(June 14, 2020)	Male	Hanging at her home- Depression
5	Kuljeet Randhawa (30 years)	Mumbai(February 8, 2006)	Female	Hanging at her residence - Depression	Siya Kakkar(16 years)	New Delhi(June 25, 2020)	Female	Hanging at her home - Depression
6	Sai Prashanth(30 years)	Chennai(March 13, 2016)	Male	Drinking poison mixed with drinks - Loneliness & Depression	Sandhya Chauhan (18 years)	New Delhi(July 5, 2020)	Female	Hanging at her home - Depression
7	Balamurali Mohan(54 years)	Chennai(June 25, 2014)	Male	Hanging at his residence - Depression	Susheel Gowda (32 years)	Karnataka(July 7, 2020)	Male	Hanging at his friends' residence– Depression
8	Shikha Joshi (40 years)	2014) Mumbai (May 16, 2015)	Female	Slitting her throat - Reason - Not reported	(32 years)	, ,		residence- Depression
9	Ranganath(66 years)	Hyderabad (December 19, 2015)	Male	Hanging at his residence – Depression				
10	Uday Kiran (33 years)	Hyderabad January 5, 2014	Male	Hanging at his residence - Depression				
11	Vijay Sai (44 years)	Hyderabad December 11, 2017	Male	Hanging at his residence - Family problems				
12	Sreenath(44 years)	Kerala April 23, 2010	Male	Cutting his wrist at a hotel room - Personal reasons				
13	Santhosh Jogi (44 years)	KeralaApril 13, 2010	Male	Hanging at his friends' residence - Family problems				
14	Kunal Singh (30 years)	MumbaiFebruary 7, 2008	Male	Hanging at his residence - Depression				
15	Mayoori(22 years)	ChennaiJune 16, 2005	Female	Hanging at her residence- Depression				
16	Monal Naval(21 years)	ChennaiApril 14, 2002	Female	Hanging at her residence - Family problems				

have the potential to cause depression which can further lead to suicide, depression as the suicide causality was not mentioned in any of the 16 cases discussed by Mamun and Ullah (2020). While, depression is usually seen as a distal cause, economic recession tends to be a proximal cause (Mamun and Griffiths, 2020d).

Similar findings have also been observed in studies conducted across Bangladesh, where financial distress was reported as being the most common suicide causality (Bhuiyan et al., 2020), although some studies have reported other causes of suicide including fear of COVID-19 infection (Mamun and Griffiths, 2020a; Mamun et al., 2020a, 2020b). The economic crisis as a result of COVID-19 lockdown has also been reported in suicidal pacts among a mother and son in Bangladesh as well as a couple in India. Similarly, the fear of COVID-19 infection was also reported as the cause of suicidal pact amongst a newlywed couple in India (Griffiths and Mamun, 2020; Mamun et al., 2020a).

Celebrity suicides in some instances have pushed their diehard fans and the vulnerable towards suicidality, in what is referred to as 'copycat' suicides (Jeong et al., 2012). Therefore, it is imperative for the press media to take it as a moral responsibility not to sensationalize the celebrity suicide cases and be extremely cautious and responsible while reporting celebrity suicides (Mamun and Griffiths, 2020d). The World Health Organization (WHO) has a set of guidelines on the reporting of suicides in the media. The criteria relevant to the reporting of the celebrity suicide cases advise the journalists to be cautious in reporting without sensationalizing the suicide (World Health Organization, 2017).

#### 5. Conclusion

Even though there have been a number of high-profile instances of Indian celebrity suicides over the past two decades owing mostly to depression, the apparent increase in incidence of celebrity suicides during the ongoing pandemic suggests a possible association between COVID-19-related restrictions and the exacerbation of preexisting mental health conditions such as depression that may increase the risk of suicidality among Indian celebrities. There arises a pressing need to pay particular attention towards the mental well-being not only of the vulnerable and high-risk groups but also of the celebrities. Counseling should be provided to those who have a history of mental health illness. The press media should also play a responsible role and be particularly cautious not to unduly sensationalize celebrity suicides, which can in turn lead to copycat suicides amongst individuals in the general population.

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# Declaration of competing interest

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